



DTE Energy®

Michigan's Projected Capacity Shortfall

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Chairman Nesbitt, Vice Chairman Glen, Vice Chairman LaVoy, members of the House Energy Committee, good morning. My name is Irene Dimitry. I am the Vice President of Business Planning and Development at DTE Energy. It is an honor to be here this morning with you. I commend your commitment to Michigan and that you are taking the time to examine issues relative to our state's energy future.

Six years ago, our nation -- and even more so, our state -- plunged into a deep recession. Michigan's hard working men and women, our business leaders, and our communities should be proud of the progress this state has made since those dark times. Our unemployment rates have dropped significantly. We are leading the nation in manufacturing jobs. Home values are rebounding. Our path to economic recovery would not have been possible without the resolve and leadership of state policymakers, such as yourselves, who have tackled numerous complex issues in recent years.

Looking ahead, the members of this House Energy Committee will certainly face numerous complex issues related to the future of electric generation in Michigan. This industry is at a critical turning point. Over the next decade, the state has the opportunity to transform its generation fleet into a cleaner, more diverse energy portfolio. We see this as a great opportunity for continued growth and prosperity for Michigan's families and businesses.

Yet, as this generating fleet transformation unfolds, we also face the challenge of forecasted shortfalls in electricity generating capacity, which threaten the reliability of Michigan's electricity supply and could threaten Michigan's economic recovery. These shortfalls will begin as soon as next year, and will only grow -- unless critical policy issues are addressed.

It will take resolve and leadership from this committee and other state policy makers to both address the challenges and to capture the opportunities associated with the fundamental changes facing Michigan's energy future. These issues are real. They are urgent. And the time to address them is now.

In my comments today, I will

- provide context and detail around Michigan's forecasted generating capacity shortfall,
- outline actions that DTE Energy is taking in response, and
- highlight two critical policy issues which must be addressed to ensure that our state has the power it needs, when it needs it, to fuel continued growth and prosperity for Michigan.

First, some context....

DTE Energy, like you, is committed to Michigan's continued success and economic growth. As the state's largest utility, we have been providing Michigan's families and businesses with electric service and generation for over 100 years. While our 2.1 million electric customers are all located in SE Michigan, we operate within a broader region through our interconnected grid.

Michigan is part of the Midcontinent Independent System Operator, or MISO. MISO administers the day-to-day wholesale electricity market, and they evaluate grid stability within and across 9 local

resource zones. Michigan's Lower Peninsula is Zone 7 and the Upper Peninsula is connected to Wisconsin as part of Zone 2.

While MISO serves a very important role, MISO does not generate electricity, nor does it buy or sell electricity. MISO can delay the closure of a power plant to preserve reliability – as we saw in the UP with the Presque Isle plant – but MISO cannot resolve our projected generating capacity shortfall by directing new generation to be built.

A spokesperson for MISO explained the organization's role by saying, "MISO sets what is called the 'planning and reserve margin.' It's a kind of cushion to ensure we have reliable electric generation on the system. But it really falls to the states and their planning processes to make sure they're bringing the right amount of generation online."

MISO has determined that the minimum reserve margin needed to ensure system reliability is about 14 to 15 percent. In recent years, more than enough generation was operating across MISO and within Michigan to maintain required reserve margins. However, those excess supplies are disappearing.

MISO projects that the region will have a generating capacity shortfall of over 3 gigawatts as early as 2016. Three gigawatts is enough power for 2.1 million homes for a year, or a city three times the size of Detroit. This shortfall increases over time. MISO has estimated that 100 coal fired generating units will retire by spring 2016, mainly due to federal regulations and aging infrastructure. Overall, in the coming years, Michigan will retire approximately 60 percent of our coal-fired generation and 30 percent of our total generation.

In the near term, Michigan's Lower Peninsula will be the most stressed zone within MISO, accounting for nearly 90 percent of the overall 2016 shortfall. Given our geography – being a peninsular state – there are limits to how much power can be imported into Michigan. The bulk of Michigan's power must come from generating assets located right here within Michigan. Given that 9 of Michigan's existing coal fired generating units will retire next year due to age and environmental requirements, the problem is clear – we are facing a shortfall of generating capacity in Michigan. This shortfall greatly increases the chances that we will be forced to take emergency actions during peak times to protect the reliability of the overall electric grid.

In response to shrinking reserve margins, prices for electric generating capacity have skyrocketed, increasing 150 times the prices we saw just two years ago. While excess generating capacity existed, annual capacity prices were low – below the actual cost to construct new capacity. DTE Energy has taken advantage of these low capacity prices in recent years, purchasing some of our short term capacity needs to meet summer peak loads while maintaining long term assets to serve the bulk of our resource needs. In contrast, it appears that retail energy marketers in Michigan have been relying largely on the short term wholesale market to secure capacity for their customers – which will be an expensive and ultimately unsustainable business model as excess generating capacity disappears.

At DTE Energy, we know that we cannot rely on short term wholesale capacity markets, supported by shrinking supplies of excess generating capacity, to reliably serve our customers over the long run.

DTE Energy is taking action to ensure that we can reliably serve our full service, bundled customers. We recently purchased the Renaissance Power Plant, a 732 megawatt simple-cycle natural gas facility in Carson City, Michigan. Furthermore, we have issued a second request for proposal for up to an additional 350 megawatts of capacity. DTE Electric expects to meet its planning requirements, including reserve margins, for our full service customers in 2016. We are not, however, at this time arranging for electric capacity for customers served by retail energy marketers.

About 2 GW, or almost ten percent, of Michigan's electric load is served by retail energy marketers. While the excess capacity that these customers have historically relied on is disappearing, their electricity needs are not. And without clear accountability to plan for and fund the generating capacity needed to serve the customers of retail energy marketers, reliability and affordability is put at risk for all customers.

This recently played out in the Upper Peninsula when WE Energy proposed closing the Presque Isle Power Plant. Although the plant was no longer required to serve WE Energy's full service customers, MISO required the plant to continue to operate to ensure reliability. The costs to keep the plant open were then allocated to electric customers across the entire Upper Peninsula.

Similar scenarios could play out in the Lower Peninsula. Without clear planning and funding accountability, there may not be enough electric capacity available to serve both full service and those participating in retail access. That would negatively impact all customers since an electric capacity shortfall would impact the entire grid, not just those customers creating the shortfall.

Michigan cannot afford to put electric reliability at risk.

The time has come for Michigan to build new generation and transition to a cleaner, more diverse energy portfolio. We estimate that transforming Michigan's generation fleet will require significant investments. We need to be careful, we need to do this right. We can address our future energy needs by investing right here in Michigan. Building new generation in our state will provide reliable electric generation, with the additional benefit of local jobs, economic development, environmental advances, and the ability to control our own energy future.

However, going forward we must address the gaps in our current regulatory structure to ensure that Michigan's energy future is affordable, reliable and fair.

How can Michigan transform its generation fleet while controlling costs and managing bills for families and businesses?

Second, who is planning to ensure sufficient capacity is built to grow our state's economy?

Finally, who will fund the needed new generation and how will costs be allocated?

It is important to provide clarity around how to best control and allocate costs while ensuring reliable electricity for Michigan during this fleet transformation. In doing this, Michigan can address the electric capacity shortfall and define its own energy future.

To ensure that Michigan has the power it needs, when it needs it, two critical policy issues must be addressed.

First, Michigan should fundamentally address the issues with the partial deregulation of our electric market. Currently, no one is planning for the customers of retail energy marketers, which puts reliability and affordability at risk for all customers. Addressing these issues is a necessary step on the path to secure Michigan's energy future.

Second, Michigan should adopt an agile and transparent generation planning process that would evaluate and analyze a full range of generation and supply options. This process would ensure Michigan is utilizing the most cost effective, reliable technologies while building a cleaner, more diverse energy portfolio.

Nationwide, the electric generation sector is facing a major transformation. Fortunately, Michigan's leadership understands the importance of a reliable electric supply as a major component of our state's economic recovery. DTE Energy and Michigan's utilities are committed to our state's continued economic growth. We believe ensuring affordable, reliable, and increasingly cleaner power -- built by Michiganders for Michiganders -- fully supports that growth.

Thank you, again, for your commitment to Michigan's families and businesses and for taking the time to carefully evaluate the challenges facing Michigan's energy future.

